Trusting Web Media

A decentralized content scoring system in the browser and blockchain

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1 Abstract

The creation of and spread of false information has led to a grand public scare, leaving constitiuents fearful of trusting reported media. For example, when polarized claims are made by oppositional sources, there are few objective or subjective tools offered to consumers on how to reconcile the conflict. Reconciling truth is essential to team building and problem solving, which we rely on at the local and national level to advance our society and relationships. Without a trust model, the information we can trust is a much smaller subset from the whole truth, preventing us from making well-informed decisions and reaching agreement with our equally constrained peers. We present a scoring model that is embedded with all web-based media, that provides consumers real-time metadata about the trustworthiness of the visible or audible content. Poor scoring media is presented behind entry points which warn the user prior to digestion. Other media scores are presented at the domain, page, or even DOM-element level, allowing consumers to proceed with digestion on an informed basis.

A secondary driver for this work is the progression of synthesized video and synthesized audio, specifically those synthesizing artificial human communication. These technologies pose a serious threat undermining trust in all medias, beyond face-to-face or physical communication. Because the web is humanity's dominant media communication mechamism, we believe that a technology trust model is highly relavant to protect our core values.

2 Problem

False information is rampant ¡cite¿ and creates disagreement among parties who ultimately seek similar objectives ¡cite, iirc this-american-life had some good sources here¿.

- enumerate multiple false information campaigns and their successes
- enumerate popular myths that still hold as truths to consumers today
- discuss how the web's prominenet role enabled the spread

In a world of untrust, one could define the root problem as the simple notion that people lie. The reasons for lying, or even simply misreprenting the truth, are not covered or discussed here. We take this unfortunate reality as a core assumption and input into our problem. A secondary problem is that the output from the primary problem is easily and quickly dispersable on the web. The easy of dispersability of information, however, is also the core strength of the web. Whilst the problem could be addressed here, it is censorship, and the authors believe censorship to generally be a threat to society versus a helping hand. A tertiary problem from the above two is that the transmitted information is likely to be trusted even from an untrustworthy source. We assume cryptographic security to be already in place for all of these communications, as that is a well researched and documented problem space already. Because we will not silence

voices who falsify or bend truth, and because we will not cut off access to such voices, we believe improving the digestion of all media is an ideal candidate.

3 Existing Solutions

- discuss fact checking campaigns, companies, individuals
- ==¿ express why these are retroactive, and why they poorly stop digestion-as-truth
- discuss centralized rating systems, independents, and why there will always be reason to cast doubt

4 Solution - WebTrust

Overview

- WebTrust is predominantly a browser feature. It extends the existing HTML DSL, enhancing web media by applying non-developer editable, visual metadata about the media, supported from decentralized score data living on the blockchain.
- WebTrust uses the decentralized web to uniquely identify individual humans, individual pieces of media
- Humans tag media as (un)authentic. These are generally people who witnessed the published media as well.
- Media providing humans gain reputation score based on authenticty

HTML

- Forbids non-children elements to be rendered within container

5 Conclusion

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